Rapid Test Evaluations

- Los Angeles County:
 - Lab evaluation on 400 stored samples to select RTs for further evaluation
 - Clinical study, 900 persons with known HIV status, to establish performance using whole blood, fingerstick specimens
 - Clinical study, 6,000 persons with unknown HIV status to determine sensitivity, specificity, and predictive value of combinations of RTs.



Rapid Test Performance: Serum

	Sensitivity	Specificity
Determine	100%	98%
Hemastrip	98.5%	99.5%
Quix	100%	97.5%
Unigold	99.0%	96.0%
SUDS	97.9%	94.5%
HIV 1-2 EIA	<u>-</u>	95.1%

(196 HIV+, 200 HIV- stored sera)



FDA Considerations

Investigational Device Exemption (IDE)

Expanded Access Treatment IDE ?



Rapid Test Performance: Finger Stick

	False		False	
	Negative	Sensitivity	Positive	Specificity
Determine	0	100%	2	99.6%
Hemastrip	13	96.2%	1	99.8%
Quix	13	96.2%	5	98.9%
Unigold	28	91.8%	0	100%

(*Prospective*, 341 HIV+, 466 HIV-)



Rapid Test Performance: Whole Blood

	False		False		
	Negative	Sensitivity	Positive	Specificity	
Determine	0	100%	0	100%	
Hemastrip	8	97.7%	0	100%	
Quix	2	99.4%	5	98.9%	
Unigold	16	95.3%	1	99.8%	
SUDS (plasma)	4	98.8%	2	99.3%	

341 HIV+, 466 HIV- venipuncture specimens



Adjusted Rapid Test Performance: Discordants Retested on Plasma

Retest results					
	Pos/tested	Neg/tested	Adjusted	Adjusted	
	False Negatives	False Positives	Sensitivity	Specificity	
Determine	0	0	100%	100%	
Hemastrip	3/8	0	98.5%	100%	
Quix	1/2	1/5	99.7%	99.1%	
Unigold	13 / 16	0/1	99.1%	99.8%	
SUDS	3 / 4	1/2	99.7%	99.8%	
341 HIV+, 466 HIV- persons					

Preliminary data. Not for citation or distribution

